

## **STATEMENT OF CONSIDERATIONS**

**REQUEST BY WASTE MANAGEMENT ENVIRONMENTAL SERVICES, INC.  
FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION  
RIGHTS UNDER EG&G IDAHO, INC. SUBCONTRACT NO.  
EGG-C93-170221, W(A)-93-005, CH-0757**

Under this subcontract, Waste Management Environmental Services, Inc. (WMES) will demonstrate key technical features of its proposed Idaho National Engineering Laboratory (INEL) Pit-9 remediation program. Pit-9 is an area in the Radioactive Waste Management Complex at the INEL containing radioactive and hazardous materials in the form of toxic metals and organic materials, including plutonium and americium. Specifically, the subject subcontract is directed toward a Proof-of-Process (POP) demonstration program intended to provide EG&G Idaho, Inc. (EG&G) with additional information that it will use in the evaluation, selection, and justification of the INEL Pit 9 remediation contractor. The Pit-9 treatment process to be employed by WMES, SOIL-EX™, incorporates constituent-specific aqueous-based chemical extraction with solids separations, evaporation and catalytic oxidation of the organics in the vapor phase. The extraction step utilizes the selective ACT\*DE\*CON<sup>SM</sup> solution and surfactant chemistry. The evaporation and catalytic oxidation steps comprise WMES's demonstrated and patented PO\*WW\*ER™ technology for concentration and volume reduction of the extraction system blow down.

The work to be performed for the POP demonstration program includes design, fabrication, and operation of pilot scale and demonstration equipment and systems, and laboratory analysis. The POP test program includes: radiological instrumentation demonstration of its proposed Dig Face Monitor concept; off-site laboratory demonstration; demonstration by WMES that its proposed proprietary treatment process for plutonium and americium satisfies the performance requirements set forth in the EG&G Idaho RFP No. C91-133136; and characterization of the treatment process product waste form.

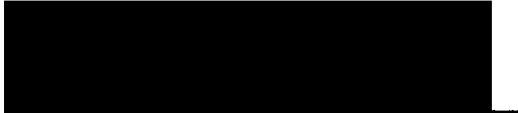
The total dollar amount of the letter subcontract through February 26, 1993 is not to exceed \$3,000,000 pending negotiation of the definitive subcontract. Performance of the Definitive Subcontract is to be complete by November 18, 1993, and is not to exceed \$8,000,000. Under the letter subcontract, WMES may declare the subcontract void if DOE fails to approve this Petition for Advance Waiver within 60 days of receipt. In addition, WMES will demonstrate its technology under this subcontract on a pay-for-performance basis.

As is indicated in the attached answers to WMES's petition for waiver, WMES has broad experience in the area of the management, treatment, and disposal of hazardous and low-level radioactive wastes. WMES's components have cleaned up over 3,400 waste sites for the federal government in the last five years. It has handled, treated, and disposed of mixed waste and alpha-, beta-, and gamma-emitting radionuclides for the USEPA, DOE, DOD and private sector clients. WMES has handled and treated materials ranging from PCBs and metals to americium, plutonium, cesium and strontium. WMES, along with its component organizations, are now working with the U.S. Nuclear Regulatory Commission to develop four new commercial low-

level waste disposal facilities that will be located throughout the U.S. The total value of private participation by WMES in the Pit 9 program, including investment in developing the proposed technologies and proposal costs, comes to nearly \$8 million.

Because of the advanced nature of the proposed technology, the full scope of the potential market for this technology is unknown. DOE interest in this project is the remediation of Pit-9 at INEL only: not in the commercialization of the technology, or the use of the technology at any other government site. The funding source for this project, DOE EM-40, Environmental Restoration and Waste Management, has indicated that the participation of WMES is essential to this program's success. For these reasons, WMES, with the concurrence of DOE Field Patent Counsel, DOE Program, and EG&G, has not accepted the standard background provisions of paragraph k. Nevertheless, WMES has agreed to the standard provisions with respect to invention waivers with the substitution of the march in rights provided in 35 U.S.C. 203. WMES has indicated a willingness and an intent to license the technology to further develop and commercialize such. As brought out in response to questions 9 and 10, WMES has entered into teaming agreements with a number of other organizations to most effectively perform the contract work. WMES has also entered into a license for application of its soil washing technology in both government and commercial markets. Absent the grant of the waiver, the advancement of these technologies will be inhibited. WMES's willingness to make a substantial investment in promoting this work is evidenced by the fact that it will forego all payment under the subcontract if its technology fails to achieve the results represented. WMES has agreed to accept the attached U.S. Competitiveness provisions.

Considering the foregoing, it is believed that granting the waiver will provide WMES with the necessary incentive to invest its resources in the commercialization of the results of the contract in a fashion which will make the contract's benefits available to the public in the shortest practicable time. Therefore, in view of the objectives and considerations set forth in DOE PR 9-9.109-6, all of which have been considered, it is recommended that the requested waiver be granted.



Mark P. Dvorscak  
Patent Attorney  
Office of Intellectual  
Property Counsel

Date: February 5, 1993

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above and, therefore, the waiver is granted. This waiver shall not apply to any modification or extension of the agreement where, through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:



Carl O. Bauer, Director  
Idaho Operations Division  
Office of Environmental Restoration

Date: 3/10/93

APPROVAL:



Richard E. Constant  
Assistant General Counsel for  
Intellectual Property

Date: 3/12/93